CIVIL FUNCTIONS, DEPARTMENT OF THE ARMY, APPROPRIATIONS, 1953

TUESDAY, MAY 6, 1952

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 11 a. m., pursuant to recess, in room F–39, the Capitol, Hon. Kenneth McKellar (chairman) presiding.

Present: Senators McKellar, Young, Ecton, and Cain.

CORPS OF ENGINEERS

FLOOD CONTROL AND RIVERS AND HARBORS PROGRAM

STATEMENT OF BRIG. GEN. C. H. CHORPENING, ASSISTANT CHIEF OF ENGINEERS FOR CIVIL WORKS

CLASSIFICATION SCHEDULES

Amounts available for obligation

	1951 actual	1952 estimate	1953 estimate
Appropriation or estimate	$187,022,500	$192,657,613	$286,675,000
Proposed supplemental due to pay increases		1,000,000	
Prior year balance available	17,305,609	18,243,631	
Reimbursements from non-Federal sources	2,880,458	3,600,000	4,000,000
Reimbursements from other accounts	14,392,201	18,583,000	19,000,000
Total available for obligation	221,600,768	234,084,244	309,675,000
Balance available in subsequent year	−18,243,631		
Obligations incurred	203,357,137	234,084,244	309,675,000
Comparative transfer from "Power plant, Bonneville Dam, Columbia River, Oreg., construction"	37,504	87,327	
Total obligations	203,394,641	234,171,571	309,675,000

NOTE.—Reimbursements from non-Federal sources are received from private individuals, commercial concerns, nonappropriated funds, and States and municipalities (33 U. S. C. 558, 559, 571, 701, and 701k).

Obligations by activities

Description	1951 actual	1952 estimate	1953 estimate
Direct Obligations			
MAJOR CAPITAL OUTLAY			
1. Construction:			
(a) Channels and harbors:			
(1) Arkansas River and tributaries (bank stabilization) Arkansas and Oklahoma	$1,026,865	$4,166,416	$2,000,000
(2) Jacksonville to Miami Waterway, Fla	414,321	2,235,679	2,200,000
(3) Mississippi River between the Ohio and Missouri Rivers: Chain of Rocks Canal	8,804,629	5,000,000	1,297,000
(4) Missouri River, Kansas City, Mo., to Sioux City, Iowa	3,640,449	4,115,009	5,000,000
(5) Baltimore Harbor and Channels, Md	612,475	840,718	800,000
(6) Missouri River, Kansas City, Mo., to mouth	2,220,273	2,331,709	3,500,000
(7) Newark Bay, Hackensack and Passaic Rivers, N. J	1,202,349	732,000	508,000
(8) New York and New Jersey Channels	2,411,162	1,484,989	912,000
(9) Buffalo Harbor, N. Y	910,138	327,564	436,000
(10) New York Harbor, N. Y	470,475	400,746	524,000
(11) Cleveland Harbor, Ohio	43,947	1,227,284	6,000,000
(12) Schuylkill River above Fairmount Dam, Pa	38,284	1,921,668	1,200,000
(13) Gulf Intracoastal Waterway between Apalachee Bay, Fla., and the Mexican border (Galveston district)	882,619	848,270	1,386,000
(14) All other	16,603,523	15,164,081	
(b) Locks and dams:			
(1) Demopolis lock and dam, Black Warrior, Warrior, and Tombigbee Rivers, Ala	2,202,337	4,000,000	5,500,000
(2) Mississippi River between Missouri River and Minneapolis, Minn.:			
Lock No. 19, Keokuk, Iowa	41,766	58,234	2,500,000
St. Anthony Falls, Minn	494,400	1,500,000	1,792,700
Other features	1,475,742	361,476	70,000
(3) Monongahela River, Pa. and W. Va	5,458,677	4,034,532	2,930,000
(4) Cheatham lock and dam, Cumberland River, Tenn. and Ky	1,867,302	3,044,376	6,000,000
(5) All other	750,000	1,291,645	
(c) Multiple-purpose projects:			
(1) Jim Woodruff lock and dam, Apalachicola, Chattahoochee, and Flint Rivers system, Georgia and Florida	2,922,000	6,300,000	11,330,300
(2) Buford Dam, Apalachicola, Chattahoochee, and Flint Rivers system, Georgia and Florida	1,327,388	900,000	3,000,000
(3) McNary lock and dam, Oregon and Washington	37,195,440	44,681,738	66,000,000
(4) The Dalles lock and dam, Oregon and Washington	579,296	4,220,704	37,500,000
(5) Old Hickory lock and dam, Tennessee	398,716	2,051,284	16,000,000
(6) Chief Joseph Dam, Columbia River, Wash	18,179,948	17,312,852	25,300,000
(7) Ice Harbor lock and dam, Washington	32,227		5,000,000
(8) All other	1,665,059	1,981,909	
(d) Fish and wildlife construction	1,805,307	1,965,256	4,256,865
2. Planning	1,038,406	2,092,357	800,000
CURRENT EXPENSES			
1. Operation and maintenance of projects:			
(a) Channels and harbors (including dredging, jetties and breakwaters)	40,419,917	45,903,809	43,488,000
(b) Operation and care of locks, dams, and canals	18,361,241	21,335,797	20,118,000
(c) Operation and care of multiple-purpose projects	3,203,419	1,824,911	3,100,000
(d) Operation and care of fish facilities	96,187	302,500	669,135
2. Operation and maintenance, special:			
(a) Removing sunken vessels and other obstructions to navigation	912,704	590,169	750,000
(b) Protecting, clearing, straightening channels of navigable waters not specifically authorized by Congress (work under sec. 3, River and Harbor Act, Mar. 2, 1945)	177,977	133,540	300,000
(c) Survey of northern and northwestern lakes	422,817	327,543	300,000
3. Examinations and surveys:			
(a) River and harbor studies	945,461	605,476	600,000
(b) Arkansas-White and Red River Basins survey	188,471	105,588	200,000
(c) New England-New York survey	100,000		300,000
(d) Beach erosion studies	308,817	424,165	150,000
(e) Stream gaging studies	144,838	205,682	70,000
(f) Fish and wildlife studies	637,388	54,947	15,000

Obligations by activities—Continued

Description	1951 actual	1952 estimate	1953 estimate
CURRENT EXPENSES—continued			
4. Regulation:			
(a) Regulation of hydraulic mining on Sacramento and San Joaquin Rivers (California Debris Commission)	$4,420	$13,400	$8,000
(b) Prevention of illegal deposits in New York Harbor	431,853	407,410	430,000
(c) Miscellaneous inspections, investigations, issuance of permits, harbor lines, commercial statistics, etc. (contingencies)	1,890,900	1,947,611	1,305,000
5. Administration:			
(a) Salaries, Office, Chief of Engineers (allotment roll)	601,750	653,500	697,000
(b) Expenses, river and harbor board	466,208	430,195	324,000
(c) Expenses, beach erosion board	92,094	129,826	108,000
Total direct obligations	186,121,982	211,988,571	286,675,000
Obligations Payable Out of Reimbursements From Other Accounts			
MAJOR CAPITAL OUTLAY			
1. Construction:			
(c) Multiple-purpose projects:			
(1) Corps of Engineers (military functions)	33,928	65,400	45,000
(2) Other Department of the Army military functions	68,428	132,200	89,000
(3) Department of the Air Force	67,226	130,400	88,000
(4) Atomic Energy Commission	71,415	137,800	93,000
(5) Department of the Interior	204,000	393,200	270,000
(6) Non-Federal agencies	261,257	491,000	335,000
CURRENT EXPENSES			
1. Operation and maintenance of projects:			
(a) Channels and harbors (including dredging, jetties, and breakwaters):			
(1) Corps of Engineers (military functions)	6,991,091	8,586,600	9,279,000
(2) Other Department of the Army military functions	1,785,370	2,300,000	2,350,000
(3) Department of the Air Force	3,725,219	4,800,000	4,850,000
(4) Department of the Navy	108,609	141,000	150,000
(5) Department of the Interior	119,093	154,000	160,000
(6) Other Federal agencies	1,157,737	1,505,000	1,550,000
(7) Non-Federal agencies	2,536,657	3,168,000	3,558,000
(b) Operation and care of locks, dams, and canals (non-Federal agencies)	65,480	79,200	80,000
3. Examinations and surveys:			
(a) River and harbor studies (Department of the Navy)	1,097	1,400	2,000
4. Regulation:			
(b) Prevention of illegal deposits in New York Harbor (non-Federal agencies)	1,349	1,600	2,000
(c) Miscellaneous inspections, investigations, issuance of permits, harbor lines, commercial statistics, etc. (contingencies) (non-Federal agencies)	15,715	20,200	25,000
5. Administration:			
(a) Salaries, Office, Chief of Engineers (allotment roll) (Department of the Interior)	2,801	3,000	----------
(c) Expenses, beach erosion board (Corps of Engineers, military functions)	56,157	73,000	74,000
Total obligations payable out of reimbursements from other accounts	17,272,659	22,183,000	23,000,000
Total obligations	203,394,641	234,171,571	309,675,000

Obligations by objects

Object classification	1951 actual	1952 estimate	1953 estimate
CORPS OF ENGINEERS			
Summary of Personal Services			
Total number of permanent positions	17,357	17,800	18,512
Full-time equivalent of all other positions	1,003	1,044	1,041
Average number of all employees	16,096	17,122	17,961
Average salaries and grades:			
General schedule grades:			
Average salary	$4,472	$4,953	$4,956
Average grade	GS-7.1	GS-7.1	GS-7.1
Crafts, protective, and custodial grades:			
Average salary	$3,131	$3,509	$3,520
Average grade	CPC-5.6	CPC-5.6	CPC-5.6
Ungraded positions: Average salary	$2,846	$3,097	$3,100
Personal service obligations:			
Pay and allowances to commissioned officers	$544,510	$550,000	$550,000
Permanent positions	55,911,613	64,045,998	67,946,956
Part-time and temporary positions	3,133,369	3,266,000	3,266,000
Regular pay in excess of 52-week base		246,002	261,044
Payment above basic rates	4,897,176	5,129,000	5,129,000
Total personal service obligations	64,486,608	73,237,000	77,153,000
Direct Obligations			
Personal services:			
Civilian	54,070,489	61,387,000	65,103,000
Pay and allowances to commissioned officers	544,510	550,000	550,000
Travel	1,403,839	1,480,000	1,575,000
Transportation of things	963,120	975,000	900,000
Communication services	555,970	570,000	590,000
Rents and utility services	1,149,867	1,400,000	1,500,000
Printing and reproduction	190,246	250,000	260,000
Other contractual services	10,078,008	13,100,000	16,000,000
Services performed by other agencies	2,142,020	2,300,000	2,500,000
Supplies and materials	11,806,889	13,000,000	12,000,000
Equipment	4,405,905	5,000,000	5,000,000
Lands and structures	97,378,148	110,666,368	169,265,500
Refunds, awards, and indemnities	6,327	6,500	6,500
Taxes and assessments	40,475	128,000	146,000
Subtotal	184,735,813	210,812,868	282,896,000
Deduct charges for quarters and subsistence	1,152,713	1,162,000	1,162,000
Total direct obligations	183,583,100	209,650,868	281,734,000
Obligations Payable Out of Reimbursements From Other Accounts			
Personal services: Civilian	9,871,609	11,300,000	11,560,000
Travel	448,594	652,000	690,400
Transportation of things	14,631	21,500	22,700
Communication services	144,549	212,500	225,000
Rents and utility services	714,874	1,050,800	1,112,800
Printing and reproduction	43,989	64,600	68,400
Other contractual services	3,202,974	4,708,400	4,961,950
Supplies and materials	1,555,246	2,292,710	2,427,900
Equipment	695,318	1,022,000	1,082,300
Lands and structures	574,015	843,500	893,600
Taxes and assessments	6,910	14,690	14,950
Total obligations payable out of reimbursements from other accounts	17,272,659	22,183,000	23,000,000
Total obligations	200,855,759	231,833,868	297,234,000
ALLOCATION TO FISH AND WILDLIFE SERVICE, DEPARTMENT OF INTERIOR			
Total number of permanent positions	45	49	89
Full-time equivalent of all other positions	26	59	50
Average number of all employees	69	102	134
Average salaries and grades:			
General schedule grades:			
Average salary	$3,970	$3,969	$3,980
Average grade	GS-6.3	GS-5.1	GS-5.1

Obligations by objects—Continued

Object classification	1951 actual	1952 estimate	1953 estimate
ALLOCATION TO FISH AND WILDLIFE SERVICE, DEPARTMENT OF INTERIOR—continued			
Personal services:			
Permanent positions	$162,741	$195,089	$356,527
Part-time and temporary positions	81,831	187,620	157,454
Regular pay in excess of 52-week base		749	1,639
Payment above basic rates	5,328		
Total personal services	249,900	383,468	515,350
Travel	13,952	20,450	27,000
Transportation of things	3,296	3,050	6,000
Communication services	1,413	1,300	2,500
Rents and utility services	3,109	3,000	13,500
Printing and reproduction	384	650	650
Other contractual services	1,590,895	1,611,285	3,937,000
Supplies and materials	45,271	95,600	187,000
Equipment	37,266	9,800	227,000
Lands and structures	592,922	208,000	22,000
Taxes and assessments	474	1,100	3,000
Total obligations	2,538,882	2,337,703	4,941,000
Summary of Personal Services			
SUMMARY			
Total number of permanent positions	17,402	17,939	18,601
Full-time equivalent of all other positions	1,029	1,103	1,091
Average number of all employees	16,165	17,224	18,095
Personal service obligations:			
Pay and allowances to commissioned officers	$544,510	$550,000	$550,000
Permanent positions	56,074,354	64,241,087	68,303,483
Part-time and temporary positions	3,215,140	3,453,630	3,423,454
Regular pay in excess of 52-week base		246,751	262,413
Payment above basic rates	4,902,504	5,129,000	5,129,000
Total personal service obligations	64,736,508	73,620,468	77,668,350
Direct Obligations			
Personal services: Civilian	54,320,389	61,770,468	65,618,350
Pay and allowances to commissioned officers	544,510	550,000	550,000
Travel	1,417,791	1,500,450	1,602,000
Transportation of things	966,416	978,050	960,000
Communication services	557,383	571,300	592,500
Rents and utility services	1,152,976	1,403,000	1,513,500
Printing and reproduction	190,630	250,650	260,650
Other contractual services	11,668,903	14,711,285	19,937,000
Services performed by other agencies	2,142,020	2,300,000	2,500,000
Supplies and materials	11,852,160	13,095,600	12,187,000
Equipment	4,443,171	5,009,800	5,227,000
Lands and structures	97,971,070	110,874,368	176,787,500
Refunds, awards and indemnities	6,327	6,500	6,500
Taxes and assessments	40,949	129,100	149,000
Subtotal	187,274,695	213,150,571	287,837,000
Deduct charges for quarters and subsistence	1,152,713	1,162,000	1,162,000
Total direct obligations	186,121,982	211,988,571	286,675,000
Obligations Payable Out of Reimbursements From Other Accounts			
Personal services, civilian	9,871,609	11,300,000	11,500,000
Travel	448,594	652,000	690,400
Transportation of things	14,631	21,500	22,700
Communication services	144,549	212,500	225,000
Rents and utility services	714,824	1,050,800	1,112,800
Printing and reproduction	43,989	64,600	68,400
Other contractual services	3,202,974	4,708,400	4,961,950
Supplies and materials	1,555,246	2,292,710	2,427,900
Equipment	695,318	1,022,000	1,082,300
Lands and structures	574,015	843,800	893,600
Taxes and assessments	6,910	14,690	14,950
Total obligations payable out of reimbursements from other accounts	17,272,659	22,183,000	23,000,000
Total obligations	203,394,641	234,171,571	309,675,000

1953 BUDGET ESTIMATE

Chairman McKellar. The committee will come to order.

All right, General, we are glad to have you with us.

General Chorpening. Mr. Chairman and members of the committee; I am always pleased to appear before the committee, and we are here now, of course, after the House has acted on the civil-functions bill.

It will be recalled that when General Pick made his opening statement about 2 months ago the House at that time had not taken action. For that reason, I would like to make a brief statement to the committee regarding the impact of the action of the House.

Chairman McKellar. Go right ahead.

General Chorpening. The President's budget estimate to the Congress amounted to $659,990,000. The House reduced that amount to $472,295,400, a reduction of $187,694,600, or approximately 29 percent.

RESTORATION REQUESTED

The Chief of Engineers is requesting that the Senate give consideration to restoring $185,397,000.

The House Appropriations Committee states in its report [reading]:

> In effecting the above-mentioned reductions the committee reiterates the position it has taken in past years that the civil-works program should be subservient to the defense needs of the Nation. Accordingly, the reductions are predicated on two major factors: First, no new projects should be started during the present emergency, and, second, elimination of certain features on projects that will not interfere with the orderly completion of portions presently under construction.

The House Committee on Appropriations, in its action toward placing first priority on the defense needs of this country, has eliminated all new construction projects and certain features on going projects which they considered would not interfere in the orderly completion of portions presently under way.

The preparation of the President's budget for the civil-works program as presented to that committee was directed toward coordinating the civil works of the Corps of Engineers with the defense effort, and on that basis has a direct bearing on the defense needs of this country. What I am saying is that our office and the Bureau of the Budget in originally preparing the budget had fully in mind the defense needs of the Nation.

A number of the projects will provide urgently needed power for industrial use. Others are essential for the requirements of commerce. Some are needed for providing protection to important food-producing areas. Others will protect defense industries and military installations. All are designed to help strengthen the Nation economically.

NEW CONSTRUCTION PROJECTS

Continued elimination of new construction projects afford little hope of providing for future essential power and navigation requirements for rapidly expanding industries and commerce or for the elimination of the crippling effects which major floods have upon the economy of the United States, such as have recently been experienced in the Missouri and upper Mississippi River Basins and that which occurred in the Kansas River Basin last year.

The Chief of Engineers urges that careful consideration be given by the members of this committee to the restoration of the construction funds which were eliminated by the House. Of the new projects eliminated—there are six in the budget—two would provide power for defense areas; Hartwell Reservoir in the Southeast and Ice Harbor lock and dam in the Pacific Northwest. Another, Lock 19 at Keokuk, Iowa, provides for the construction of a modern structure to replace an obsolete and structurally weak lock in a modern waterway serving the increasing needs of commerce.

NEW PROJECTS FOR FLOOD CONTROL

Three projects—Tuttle Creek Reservoir, Kans.; Cape Girardeau, Mo.; and Topeka, Kans., on the Kansas River—provide flood protection for the Kansas-Missouri area which received such severe damage from the floods of June and July in 1951.

In view of these facts, I urge as strongly as I know how that the committee restore the funds for the initiation of construction on these projects.

The House Committee on Appropriations has stated that the other prime consideration in the reductions made for construction was the elimination of certain features on projects that would not interfere with the orderly completion of portions under construction. The effect of each reduction made has been carefully analyzed, and the detailed information concerning the effect of the proposed reductions has been furnished the committee. I will give more information on that today.

I would like to point out in a general way, however, that the reductions made on many of the projects will create serious construction problems and delays which can only result in increased costs and delayed benefits which I consider not to be in the interest of the United States.

There are a few projects on which, due to recent developments, the full restoration will not be required. That accounts for the difference between the cuts made and what we are asking for restoration.

Chairman McKellar. General, may I interrupt you there?

General Chorpening. Yes, sir.

CHEATHAM DAM, CUMBERLAND RIVER, TENN.

Chairman McKellar. Cheatham Dam on the Cumberland River has been completed to what extent?

General Chorpening. We have that percent, sir. The lock is under way there. Funds so far appropriated amount to $6,636,500 out of an estimated Federal cost of $14.2 million. So, appropriationwise, it is about 40 percent.

Chairman McKellar. Would it not cost more to discontinue and stop that work?

General Chorpening. Absolutely, sir.

Chairman McKellar. I happen to know that that power is badly needed. I am talking about the economy involved.

General Chorpening. Yes, sir. Anytime a project, after it has been started and is under construction, is stopped there are considerable

costs just in closing out and then starting again. Of course, any funds expended lie fallow. There is no value received whatever from moneys expended previously.

Chairman McKellar. All right, sir.

Senator Young. May I ask a question?

Chairman McKellar. Yes, sir.

GARRISON DAM, N. DAK.

Senator Young. General Chorpening, recently General Pick said that floods on the Missouri River were the worst in the history of the white man. I think everyone living will agree that there is great need to complete the dams out there to avert future floods.

Now, I notice that much of the criticism of the present program is that after we have spent hundreds of millions of dollars we still have floods out there. People do not seem to realize that only one of several dams on the Missouri has been completed and that you cannot stop floods until you close in these dams.

Do you have any figures with you on how much more money could be economically and efficiently used to complete at an earlier date construction of these dams? The first one is Garrison. How much more money could you economically and efficiently use?

General Chorpening. On Garrison, Senator, the amount that is now in the budget is all that we can economically use in the next fiscal year.

Senator Young. How much did the House reduce it?

General Chorpening. $4 million.

Senator Young. If you got the estimate, that would be all that you could efficiently and economically use?

General Chorpening. Yes, sir; $4 million was reduced on the Garrison Dam by the House. The approved estimate by the Budget was $34 million.

Senator Young. That would be the maximum amount?

General Chorpening. That will be sufficient for us to go ahead on the schedule. We will be able to make closure next year as planned, and any greater amount of money just would not enable us to make closure this year. We are not that far along.

Senator Young. May I ask you the same question on Oahe, Randall, and Gavins Point?

FORT RANDALL DAM, S. DAK.

General Chorpening. On Randall the budget request was $37,500,000. The House allowed $30 million, a cut of $7,500,000. We are asking for the restoration of that amount, and that will be adequate to go ahead with that construction. We propose, as I believe the Senator knows, to make closure of that dam this summer.

OAHE DAM, S. DAK.-N. DAK.

Now, in the case of Oahe, the budget request was $3,500,000. The House cut that amount to $700,000, or a cut of $2,800,000.

Senator Young. And you are asking for the restoration?

General Chorpening. Yes; we are asking for the restoration.

Senator YOUNG. In order to speed up the construction of the dam and looking toward the day when you can close it and use the dam to prevent floods, could you use any more money efficiently?

General CHORPENING. Yes, sir; we could.

Senator YOUNG. How much more?

General CHORPENING. We could use, I believe $12 million to $15 million on Oahe this coming fiscal year.

I would like to point out that that is on the basis that we will have funds available reasonably soon this year, because if we did not have them until later on in the fiscal year, as was true last year, we could not use that. But I am assuming that we would have the funds available in time so that we could go ahead with our program.

Chairman MCKELLAR. We are going to do our best to get this bill through as soon as possible.

General CHORPENING. Yes, sir.

GAVINS POINT DAM, N. DAK.

Senator YOUNG. There was one other dam, Gavins Point. Could you give us the same figures on Gavins Point?

General CHORPENING. Yes, sir. $13 million was included in the approved budget estimate for Gavins Point. The House eliminated all funds for Gavins Point. We are asking for the full restoration.

Senator YOUNG. The restoration of $13 million?

General CHORPENING. Yes, sir.

Senator YOUNG. And that will be sufficient?

General CHORPENING. Yes, sir; that will be sufficient.

Chairman MCKELLAR. How much have you already spent on Gavins Point?

General CHORPENING. Last year, fiscal 1952, was the first year we received construction appropriations, in the amount of $2 million.

Chairman MCKELLAR. And you have spent that?

General CHORPENING. It will be obligated by the end of the fiscal year, sir. We had earlier had about $700,000 for planning. So, the total appropriations to date are about $2,700,000.

Chairman MCKELLAR. And that would be practically lost unless this is continued?

General CHORPENING. It would be of no value in itself; that is correct, sir. We have gone right ahead since those funds were made available. We have let contracts for access roads and made other contracts in connection with the project.

You will recall that Gavins Point is a very important and integral part of the full Missouri Valley series of reservoirs. Particularly is it essential to tie into Fort Randall to even out the flow of the river. We can produce a great deal of prime power at that reservoir.

Chairman MCKELLAR. Let me ask you this question: Is it not true, as it was in Tennessee many years ago when you were building dams there—and we had a lot of trouble about it—that these same criticisms were aimed at those dams down there? But, as a matter of fact, they have proved not only of great value to our defense purposes but they have been of great benefit economically. Will that be true of Garrison and these other dams?

General CHORPENING. Completely true, sir. Those projects are all multiple purpose. They have flood-control storage, and hydroelectric-

power storage. In Garrison we are proposing to have an irrigation development. So, the impact on that area will be tremendous in every respect.

FLOOD CONTROL

Senator YOUNG. It will serve one other good purpose if it proves to the rest of the country that these dams can stop these floods if they are completed.

General CHORPENING. Yes, sir.

Chairman MCKELLAR. I have had the idea ever since we heard the testimony about the flood last year in Kansas City that the projects proposed for that area would have a tremendous impact on controlling those floods.

General CHORPENING. The floods this year could have been controlled. You will recall that General Pick the other day brought out the fact that if these reservoirs had been in place the Missouri River would have been just a very nice, quiet stream going down past Omaha and Sioux City. He showed that on the chart.

Senator YOUNG. I do not think there is any question about that.

General CHORPENING. There would have been no difficulty whatever. There would have been only minor and local flooding up and down the Missouri River.

FORT PECK DAM, MONT.

Senator YOUNG. How much did Fort Peck Dam lower the floodwaters?

General CHORPENING. The effect of Fort Peck Dam on the stage of the flood at Omaha and Council Bluffs was 2 feet. In other words, there would have been two more feet of water there; and, gentlemen, I do not think we could have held two more feet. It was touch and go to hold the water that actually did come down.

Senator YOUNG. Fort Peck may well have saved Omaha.

General CHORPENING. I think it did, because we had at the wrong time or the right time, whichever way you want to say it, an inflow into Fort Peck of 100,000 cubic feet per second which would have been added to the water coming down. We held all of that water in Fort Peck.

Senator ECTON. General, at that point, may I ask you this: If the additional tunnel had been in operation and the other generator that has been asked for had been in at Fort Peck, would that have made any difference in the situation below Fort Peck Dam?

General CHORPENING. It would have made a difference, assuming that we were continuing to produce power from all generators installed, of about 2,000 cubic feet per second.

Senator ECTON. How much would that have raised the water level at Omaha, for instance?

General CHORPENING. Maybe an inch. I would have to run a study on it, but I think it would be insignificant certainly.

Senator ECTON. So, it really would not make any difference with regard to controlling the floodwaters below Fort Peck if we had the extra tunnel and the extra generator and the production of the needed power?

General CHORPENING. The difference would be insignificant, and only very small effect would be felt in the portion of the river between Fort Peck and Garrison, because in another year Garrison will have been closed and the floodwaters coming down would be stored there.

Senator ECTON. Mr. Chairman, I am asking this question at this particular point of General Chorpening for the simple reason that many of us have been interested in getting all of the available power out of Fort Peck that would be possible, but the question has arisen in several sections in the Northwest: Can we have a dam like Fort Peck that was designed in the first instance primarily as a flood-control project and still develop power, the maximum amount of power, out of it and use such flood-control projects as multiple-purpose dams and properly protect communities below the dams?

I think it is important to get that information in the record and get it straightened out.

MULTIPLE-PURPOSE PROJECT

General CHORPENING. Yes, sir, we can do that. Fort Peck, of course, was built as a multiple-purpose dam for four purposes: Navigation, flood control, hydropower, and irrigation. It was always planned that there would be a power installation there. But the amount of water that has to be discharged to produce power there is very nominal compared to the amount of waters stored.

Right here, for instance, as I said, the maximum inflow into Fort Peck was nearly 100,000 cubic feet per second, whereas at no time during this flood did we release over a few thousand second-feet which was to produce hydroelectric power, Similarly, on other projects down the river the amount of water that will ever be released to produce power is such that that amount can be kept within the channel capacity of the stream.

Senator YOUNG. Would the water then in the reservoirs be reduced sufficiently when the floods occurred to take care of the extra run of water?

General CHORPENING. That is correct. When we store floodwaters in any reservoir, then just as soon as the rise in the river has gone on down stream and the channel can take that flood water that has been stored, we start releasing the water up to bank full so it will do no damage. We get the floodwaters that have been stored out of the reservoir so that it is ready to take on another flood. That is the whole principle, of course, of flood-control reservoirs.

Senator ECTON. Off the record.

(There was a discussion off the record.)

General CHORPENING. Have I answered your question?

Senator ECTON. Yes. I think it is very interesting that with the addition of another generator and this extra tunnel that we have been talking about, the amount of water necessary to generate that power would only raise the river down at Omaha a couple of inches.

General CHORPENING. I do not think it would be that much.

Senator ECTON. At least it would be insignificant.

General CHORPENING. Insignificant; yes, sir. I think you can get that comparison when you talk about the maximum inflow. Now, we have had inflows in history at Fort Peck up to 158,000 cubic feet per second. I believe that was the maximum flood in 1908.

Senator ECTON. What was it this time?

General CHORPENING. Just a little less than 100,000 cubic feet per second.

Senator ECTON. So it was way below what the maximum was?

General CHORPENING. That is correct.

Chairman MCKELLAR. Senator, may I ask you this question: Is it not true that if these dams were completed and put into operation they would help your State and the surrounding areas very much?

Senator ECTON. There is no question about that.

Chairman MCKELLAR. It certainly has done our part of the country a great deal of good, and I believe it will do your part of the country as much or even more good.

Senator ECTON. What we are up against in some places in Montana with these big dams is that in the fertile valleys we are covering up a lot of good fertile land, which takes that land out of production and cuts down the tax base of the respective counties.

Chairman MCKELLAR. That is so in every State.

LOCATION OF DAMS DISCUSSED

Senator ECTON. That happened with Fort Peck Dam and also is happening at Canyon Ferry. You take dams higher up in the mountains, like Hungry Horse, for instance, in a native wilderness, and about all you cover up there is a rocky canyon and a horse. But there are no agricultural lands involved.

I believe that in the future—speaking from knowledge of my own State—our dams should be built in the mountainous areas, right at the source of the supply of the spring run-off. I think that will alleviate the flood conditions below and give us power developments and store water for irrigation, and we will not seriously handicap the communities having their good land in their valleys covered up.

Senator YOUNG. Mr. Chairman, I think the greatest benefits that would come to North Dakota would be when we can use these waters for irrigation purposes. It is true that there is considerable benefit now from stopping floods and from the power, but when we can use the waters for irrigation, then we will see the real benefits.

Chairman MCKELLAR. I think you are right.

Senator YOUNG. You can see from that map that a large part, a considerable acreage in both North and South Dakota will be inundated. That is good land. But we can more than make up for that when we can irrigate other large tracts of land.

General CHORPENING. Should I proceed, sir?

Chairman MCKELLAR. All right, General.

FLOOD CONTROL PROJECTS

General CHORPENING. However, of the amount of approximately $143,476,600, which represents the reduction on going projects as proposed by the House, it is recommended in the interest of economy and from the standpoint of the Nation's defense and general welfare that $141,585,900 be restored.

RIVERS AND HARBORS, MAINTENANCE AND OPERATION

The House also reduced the funds requested for maintenance and operation and care of our rivers and harbor projects by $2,030,100. Even if the full amount requested in our budget is restored, our backlog of maintenance work will increase. Maintenance of harbors and channels has already been reduced to the point where many local communities are suffering severe economic dislocation. In addition, many Government structures are deteriorating rapidly, and their continued deterioration will only result in increased Government expenditure at some future date. Accordingly, complete restoration of these funds is most essential.

Our commerce Nation-wide is increasing every year by great amounts. These funds that I now mention are those that are utilized for the maintenance of all of the great harbors and waterways of our Nation. The funds have been restricted for some years, and properly so, but we have gotten to the point where vital waterways are unable to be kept, with the funds on hand, to project depth and open. Consequently, shipping is suffering. The amount in the budget is a most austere schedule for getting this work done.

PLANNING AND SURVEYS

There are two other phases of our program which would be drastically curtailed by the House action. I refer to our planning and survey programs. All funds have been eliminated for the planning program as well as all funds for our survey program except for an extremely limited amount which was considered by the House sufficient to carry forward those surveys of vital interest to the present defense efforts.

We feel very strongly about these two things. Without some survey and some planning funds, we are just losing ground on some of those things that should be carried forward. I will talk more about that as we get into the book over here.

The reductions would not permit the continuation of programs on a minimum, orderly basis to meet the needs of national defense and changing conditions.

Now, since so much of the civil-works program is now devoted to projects involving hydroelectric power, I believe that the chairman and members of the committee would be interested in a short summation of the impact of the cuts that have been made on that program. I would like to present that now, if it is agreeable with the chairman.

Chairman McKellar. Does that include the amounts that you wish restored in each one?

General Chorpening. I will get to that later, sir.

Chairman McKellar. Will you put that into the record?

General Chorpening. Yes, sir.

MULTIPLE-PURPOSE PROJECTS

General Pick, a few days ago, described to you the flood damages which resulted within the last year in two catastrophes in the Missouri Basin. I should like to make this short statement with regard to those multiple-purpose projects which are a part of the over-all approved plans of water resource development, projects which include

hydroelectric power with flood control, navigation, and other purposes in the Missouri Basin, the Southwest, the Southeast, and the Pacific Northwest.

One of the means of controlling floods is through flood-control reservoirs.

Satisfactory sites for dams and reservoirs are limited. Many sites are not feasible from engineering or economic aspects. It would be wasteful of our great natural resource, water, if a site should be developed which did not make provision for all features of water use, present and future, which can be economically justified. Multiple-purpose development of a site as part of an integrated plan for water resource development will, in addition, usually result in a more economical plan than would result from provision for the various purposes individually. It often makes economically feasible additional water-use development, as part of a multiple-purpose project, which could be uneconomical if constructed separately.

That is why we believe, in general, that all authorized purposes or functions of a multiple-purpose project should share equitably in the savings resulting from the combined construction.

POWER INSTALLATIONS

At the present time the Corps of Engineers has 10 multiple-purpose projects in operation, which include hydroelectric-power installations. All 10 projects serve to provide flood control and/or navigation and, in addition, give benefits for other purposes. I mentioned the value and use of Fort Peck in the recent flood.

The hydropower in operation at these 10 projects now completed is 1,200,000 kilowatts, ranging from 518,000 kilowatts at Bonneville, to 16,000 kilowatts at the St. Marys River Sault locks, Michigan.

At all but one of these power installations, surplus power to the needs of the project is sold to the Department of the Interior. Power from the small St. Mary's plant is sold by the Corps of Engineers to the local private utility for distribution to its customers and by it to REA cooperatives and municipal systems in the area.

Now, funds for 23 multiple-purpose projects, which include power, are in the approved budget for the fiscal year 1953. Twenty-three of the projects include power. Twenty-one of these projects are now under construction. One new project is proposed on the Savannah River—that is Hartwell Dam—Georgia and South Carolina. The other one proposed is on the lower Snake River in the Pacific Northwest. That is Ice Harbor.

Power installations at these 23 projects will total about 6 million kilowatts, of which about 4 million kilowatts is scheduled to be in operation in the next 5 years.

Over $1 billion has already been appropriated for construction of these multiple-purpose projects. The fiscal year 1953 approved budget estimate was $316 million. The amount allowed in the House bill is $208 million, a reduction of about 34 percent on these multiple-purpose projects which do include power.

If we consider for the present only the effect on power production, the result of this reduction is serious. Funds were included in the

budget by the President as necessary for our defense preparation. Load forecasts by the Federal Power Commission have shown the need for these projects as scheduled. The necessity has been supported by the Munitions Board, the Defense Electric Power Administration, the Secretary of the Interior, the Defense Production Administration, and by other defense agencies.

All of the power which these multple-purpose projects will make available has been scheduled, together with additional power from other sources, including private power companies, to meet regional and national power needs of essential civilian and defense purposes. If the schedule for completion of those projects is delayed, the effect is to delay additional power supply needs for those purposes.

CUT IN MULTIPLE-PURPOSE PROJECTS

Now, the combined effect of the reduction specified by the House on 18 of these projects is to delay about 4,500,000 kilowatts of power up to 1½ years. The kilowatt-hours which will not be obtained for the period of delay is about 25 billion.

I am trying to present this in broad figures, so as to give you an indication of what will be done if these cuts are allowed to stand.

Twenty-five billion kilowatt-hours is more than 3 weeks' total power use in the United States at this time. It is sufficient, if used for that purpose, for more than 1 year's present total aluminum production. Expressed in another way, the kilowatt-hours which could otherwise be obtained will be about equal to 1 year's total present power use in the entire Pacific Northwest. Almost 90 percent of these kilowatt-hours would be in the Pacific Northwest.

The value of the power for the period of delay is estimated at about $89 million.

In other words, if we do not go ahead with these projects and do not have the power on the line at the dates now scheduled, the value of power lost to the Government will be in the neighborhood of $89 million.

Interest charges accumulate during the period of construction. Interest charges on the work which is partially completed on these multiple-purpose projects will be on the order of $25 million per year. In other words, we will have structures partially completed where Federal funds have been invested. There is no revenue coming in, but interest is certainly being paid on those funds with no value coming back to the people and to the Government.

The effect of a 1-year delay on these projects in which large sums have already been invested is to add considerably to costs, both in interest charges and as the result of added construction costs from inefficient stop-and-start schedules. In other words, when you stop and start or slow down, it does run up the costs.

I have prepared a tabulation which shows for each of these projects briefly the effect of the cut in funds from the budget request, and I would like to have that made a part of the record, sir.

Chairman McKellar. Without objection, it is so ordered.

(The document referred to follows:)

Effects of reductions in budget requests for fiscal year 1953 on scheduled operations of multiple-purpose projects with power

[Millions of dollars]

Project, planned installation, kilowatts, scheduled initial generation	Appropriations to date	Budget request for fiscal year 1953	Amount allowed by House	Effect of reduction	Restoration requested
Albeni Falls, Idaho, 42,600 kilowatts, August 1954.	$12.9	$8.1	$6.0	Will delay power production at site 1 year (42,600 kilowatts).	$2.1
Blakely Mountain, Ark., 75,000 kilowatts, July 1954.	17.6	6.6	6.0	Will delay power 4 to 6 months (75,000 kilowatts).	.6
Bull Shoals, Ark., 160,000 kilowatts, June 1952.	73.3	1.4	1.0	Relocations delayed. Will delay full operation for flood control or power.	.4
Chief Joseph, Wash., 1,024,000 kilowatts, December 1955.	43.6	25.3	11.5	Will delay project 1 year (1,024,000 kilowatts).	13.8
Dalles, Oreg., 1,092,000 kilowatts, November 1957.	4.8	37.5	0	Will delay minimum of 18 months from November 1957 to May 1959 (1,092,000 kilowatts).	37.5
Detroit, Oreg., 118,000 kilowatts, June 1953.	53.4	10.7	10.0	Will delay Big Cliff afterbay unit 1 year (18,000 kilowatts).	.7
Fort Randall, S. Dak., 320,000 kilowatts, November 1953.	120.6	37.5	30.0	Will delay power; delays last 4 40,000-kilowatt units about 6 months (160,000 kilowatts).	7.5
Gavins Point, Nebr., 100,000 kilowatts, April 1956.	2.7	13.0	0	Will delay minimum of 1 year; reduces value of Fort Randall (100,000 kilowatts).	13.0
Garrison, N. Dak., 400,000 kilowatts, April 1955.	148.3	34.0	30.0	May delay closure for 1 year; delay flood control and power (240,000 kilowatts).	4.0
Hartwell, Ga., 180,000 kilowatts, December 1956.	.3	4.0	0	Will delay minimum of 1 year (180,000 kilowatts).	4.0
Ice Harbor, Wash., 195,000 kilowatts, December 1956.	.9	5.0	0	Delays indefinitely; minimum of 1 year (195,000 kilowatts).	5.0
Jim Woodruff, Fla., 30,000 kilowatts, July 1954.	21.2	11.3	11.0	Delay power about 1 month	.3
John Kerr, N. C., 204,000 kilowatts, September 1952.	77.4	6.8	6.0	Will delay last 2 32,000-kilowatt units about 6 months (64,000 kilowatts).	.8
Lookout Point, Oreg., 130,000 kilowatts, July 1954.	50.0	17.3	16.0	Delays completion of third 38,000-kilowatt unit for 1 year (38,000 kilowatts).	1.3
McNary, Oreg., 980,000 kilowatts, December 1953.	155.1	66.0	60.0	Will delay power and project for 6 months (980,000 kilowatts).	6.0
Oahe, S. Dak., 425,000 kilowatts, 1959.	13.4	3.5	.7	Delays flood control 1 year; extends calculated risk on Randall.	2.8
Old Hickory, Tenn., 100,000 kilowatt-hours, October 1954.	2.5	16.0	8.0	Power delayed 6 months or longer (100,000 kilowatt-hours).	8.0
Tenkiller Ferry, Okla., 34,000 kilowatt-hours, March 1953.	20.0	2.3	2.0	Crest gates delayed; delays full operation for flood control.	.3
Total	818.0	306.3	198.2		108.1
Additional for projects, including power, not cut by House.	180.0	[1] 9.3	9.3		
Total, construction	998.0	315.6	207.5		108.1
Planning funds for projects including power.	4.6	1.1	0		1.1
Total	1,002.6	316.7	207.5		109.2

[1] See the following:

	Million dollars
Buford	3.0
Clark Hill	4.1
Ft. Gibson	.5
Whitney	.2
Dale Hollow	1.5
Total	9.3

General CHORPENING. I urge that funds be restored to the budget amount in order that these projects may be completed as they are scheduled. I feel that we have a major responsibility in the Corps of Engineers not only for flood control and navigation but to assure that this power is available to meet any defense or other needs.

That was all I had on that, sir. I thought there might be some questions.

Chairman MCKELLAR. Are there any questions, gentlemen?

General CHORPENING. Before I go on to the requests for restorations, I want to mention this: That as the bill has been passed by the House of Representatives the appropriations structure has been changed quite considerably.

APPROPRIATIONS STRUCTURE

For many, many years the appropriations of the Corps of Engineers have been mainly in three parts: flood control, rivers and harbors, and Mississippi River. Now a breakdown has been proposed wherein in each of those three we have construction, maintenance, and examinations and surveys, and then administration has been pulled out separately. We do not believe that that is a good thing. I do not say that it could not be done. There is no doubt about that. But it would reduce somewhat the flexibility that we have, and I do not see how it would save any money. Whenever you make broad changes of that type, it does cost money just to put the changes into effect.

I would ask that the breakdown in the appropriation structure as it has been for many years—it is time tried—be retained.

Chairman MCKELLAR. Is there anything further?

General CHORPENING. Now, sir, I believe that each of the members of the committee has a copy of our requests for restoration which we have presented on those parts of the program for which we are asking restoration.

Chairman MCKELLAR. Was that filed with the committee?

General CHORPENING. Yes, sir. This was filed with your committee, sir, after the action by the House. They contain the reasons for asking for the restoration on the specific projects where cuts had been made by the House.

Chairman MCKELLAR. I have in my hand what appears to be a résumé of one of the projects for which funds are requested.

PLANNING REPORTS

General CHORPENING. I am informed that it is the planning report. I might say something about the planning report that the chairman has in his hands. Last year the Appropriations Committee of the House asked us for a planning report on every project and very closely delineated the contents to be placed in it. Those reports, upon their direction, were prepared and given to it by March 1. They were quite valuable to the members.

Chairman MCKELLAR. Is this a part of the House record?

General CHORPENING. It was not made a part of the record, sir. They used it, however, in the committee in the preparation of their action on our budget.

Chairman MCKELLAR. All right, sir.

RIVERS AND HARBORS SURVEYS

General CHORPENING. On page 1 of our "requests for restoration" book, under "Rivers and harbors" we are asking for full restoration on all of the activities included under the appropriation "Examination, survey, planning, and other study programs." We are also asking that $2 million included by the House for "Fish and Wild Life construction," be taken out of this particular appropriation and placed over under the appropriation "Construction," where we think it belongs.

I would like to mention that in the breakdown of the funds as given by the House, $305,000 only will be available for general survey studies.

Now, with the large program of surveys that we have under way, this is just not an adequate amount of funds, we feel. No general survey funds were made available to us in fiscal 1952. We are practically out of funds at this time; and we feel very deeply that the budget amount of $600,000 as requested should stand.

Now, I want to particularly mention the next two items under 1 (b) and (c), the Arkansas-White-Red survey and the New England-New York survey. Those are two surveys that are being carried on cooperatively with other Federal agencies and the States. The Corps of Engineers is designated as the chairman agency. Those investigations are supposed to be completed by June 30, 1954. The funds included in the budget are the minimum required to carry those surveys forward and complete that work on schedule.

You will note that there were no funds allowed for planning of authorized projects. We are asking for the full restoration of planning funds. Otherwise, we are not able to go ahead and get important projects to the place where we could properly ask for construction funds.

Senator YOUNG. You have almost completed the planning on many of these projects, have you not?

General CHORPENING. There are many projects where planning is under way and many others where we feel that it should be going along. With respect to some, planning is nearly complete.

NEW ENGLAND DAM CONSTRUCTION

Chairman MCKELLAR. Are there any public dams at all in New England? I do not represent that part of the country except in a general way, but I would like, for my information, to know whether there are any public dams in New England?

General CHORPENING. Yes, sir, there are. We have completed some. Those are for flood control rather than on the navigation side. But we do have some. We can get that information.

Chairman MCKELLAR. Will you put that in the record?

General CHORPENING. Yes, sir.

(The information referred to follows:)

There are 9 dams constructed by the Corps of Engineers in the New England area. They are as follows:

Birch Hill Reservoir, Mass.
Knightville Reservoir, Mass.
Tully Reservoir, Mass.
Blackwater Reservoir, N. H.

Franklin Falls Reservoir, N. H.
Surry Mountain Reservoir, N. H.
Union Village Reservoir, Vt.
Mansfield Hollow Reservoir, Conn.
Edward MacDowell Reservoir, N. H.

PLANNING FUNDS

Senator CAIN. General, may I ask what the total of the planning moneys cut from the House was?

General CHORPENING. Under Rivers and Harbors, it was $800,000, and on Flood Control it was $1,500,000.

Senator CAIN. Does it mean that if that House cut is sustained some of the projects on which you have not yet completed planning will have the remainder of the planning required forestalled or delayed for quite a considerable period of time?

General CHORPENING. That will be the eventual result of it; yes, sir.

Senator CAIN. It means then that if you are allocating what moneys are available to you, your judgment would dictate that some plans not yet completed would have to be put on the shelf until a future date?

General CHORPENING. That is correct, sir, and we have the same situation on our surveys, Senator. We have many hundreds of outstanding surveys. They were assigned to us by directives of the Public Works Committees of the Congress or by the acts of Congress itself. Now, that work is coming to a complete halt because we had no funds appropriated in fiscal 1952 and very little funds included by the House in this bill.

Chairman MCKELLAR. What is the amount that you wish for that purpose?

General CHORPENING. Under Rivers and Harbors, $600,000 was the total amount for general studies, sir, and the Budget also included $300,000 for the Arkansas-White-Red River Basins study and $200,000 for the New England-New York study.

Senator CAIN. It might be quite possible that on a review of this whole situation it would be determined that such committees as the Public Works Committee of the Senate, on which I sit, have encouraged too much planning for this emergency period. That is only to say that I, as a member of that committee, will be very willing to assume any required responsibility and to seriously examine into the question of whether or not, Mr. Chairman, we are attempting to accomplish too much too rapidly. All I know is that this is a most complicated situation.

Chairman MCKELLAR. Well, let me ask the question of the General. Do you think we are trying to accomplish too much too rapidly?

General CHORPENING. I do not feel so, sir.

Senator CAIN. I appreciate very much, sir, your pursuing the question, because I raised it without any prejudice of any kind. I have been among those who have voted in a positive fashion for every requirement imposed upon the Corps of Army Engineers, and I did that for what I thought was good and sufficient cause. So I think your question is most proper, and I am interested in the General's response to it.

NAVIGATION PROGRAM

General CHORPENING. We feel that the need for carrying out investigations for navigation and multiple-purpose use of our waterways is as urgent as at any time in the history of the Nation, because our population and our industries are increasing at a great rate. That situation brings about the need for solving the problems of increased transportation or water-resource requirements.

Now, the only way that those can come about is by the Corps of Engineers being responsible to the directives of the Congress to make surveys that we have been assigned.

Without funds those surveys cannot be prosecuted. That in brief is the situation.

Chairman MCKELLAR. You have to have these surveys made before you can build?

General CHORPENING. Yes, sir. Those surveys are made in our field offices and come up through the Rivers and Harbors Board, which acts on those surveys. The recommendations of the Chief of Engineers then are sent on up to the Public Works Committees of the Congress where they hold hearings on the recommendations and, if favorably acted on by the Congress, the projects are authorized.

Now, we are far from a static country. We have a developing economy here all the time, and industry is moving from one part of the country to another. Sizes of ships are increasing to carry larger loads. And if we remain static here, then it just means that this phase of our national development cannot go forward.

Senator CAIN. Well, in the absence of surveys which the Public Works Committee requires the Corps of Engineers to make, it would be almost impossible, would it not, to authorize intelligently?

General CHORPENING. Yes, sir; that is correct.

Senator CAIN. In the absence of surveys, it would just be a guess and a chance that you would authorize projects which in due time would be justified.

General CHORPENING. We would have no basis on which to make recommendations to the Congress as to whether a project should be built, whether it is justified, whether it is engineeringly feasible.

SURVEY COSTS

Senator CAIN. Well, I believe that such testimony as you presently are offering will find interest with many members of the Senate, General, who are not members of this committee.

Senator ECTON. General, could I ask you to give the average percent of the total cost of projects that is required for surveys and studies before you make recommendations to the Congress? I know that that would vary with each project, but I was wondering whether we could get some general average.

General CHORPENING. Let me say this: That in the neighborhood of 50 percent of the directives given to us for preliminary examinations or surveys are returned to the Congress unfavorably recommended.

Senator ECTON. And if you do not feel they are feasible or justified, you do not recommend them?

General CHORPENING. That is right, sir. We appreciate the confidence of the Congress. Very, very seldom has the Congress authorized a project if we have unfavorably recommended on it.

To arrive at a percentage, it would be necessary to determine whether we should use the funds that we have applied to surveys that were not favorably recommended? Should that amount be included or not? The surveys are a very minor amount compared to the end total of the construction of those that are authorized.

Senator ECTON. I appreciate that.

General CHORPENING. It is less than 1 percent. I can make that statement. It is money extremely well invested because it prevents projects getting authorized that should not go ahead.

Senator ECTON. That is right. That is the best money that we can spend.

General CHORPENING. Yes, sir.

Senator ECTON. It is most important to not only keep from building nonprofitable and useless projects, but also to see that you know all the facts and conditions on projects that we do build, because they are so terribly expensive to complete and to maintain. I think it is imperative that not only the Congress know but that you have all of the information that it is possible to get.

General CHORPENING. May I say that not only do the funds that we expend have value on the projects that go ahead, but we have all of that mass of information and technical data that we have developed from previous studies and surveys that we can apply to current or future studies which the Congress may direct.

Senator ECTON. I personally believe, Mr. Chairman, that this is the best money that we can possibly spend.

Chairman MCKELLAR. It is absolutely necessary. I will say to the Senator that I was here when they started this dam business way back in 1925 or 1926. It was then sharply contended that you could not make power out of water, that it was not practical. The Senators argued on the floor that it was wholly impractical. But time and experience have taught us, and these investigations have taught us, that there is much power to be had.

General CHORPENING. In amplification of my informal answers to the questions of the chairman and the members of the committee, I would like to place in the record, if I may, the requests for restorations that we have presented.

Chairman MCKELLAR. Is that the résumé?

General CHORPENING. Yes, sir.

Chairman MCKELLAR. Without objection, it is so ordered.

(The documents referred to follow:)

Project	Amount in act	Proposed amendment	Total request
1. River and harbor studies:			
(a) General studies	$305,000	$295,000	$600,000
(b) Arkansas-White and Red River Basin survey	50,000	150,000	200,000
(c) New England-New York survey	50,000	250,000	300,000
2. Beach-erosion studies	150,000	0	150,000
3. Planning	0	800,000	800,000
4. Stream-gaging studies	70,000	0	70,000
5. Fish-and-wildlife studies	10,000	5,000	15,000
6. Fish-and-wildlife construction	2,000,000	−2,000,000	0
Total direct obligations	2,635,000	−500,000	2,135,000

1. RIVER AND HARBOR STUDIES

(a) *General*

The Army civil functions appropriation bill for fiscal year 1953, as passed by the House of Representatives on April 2, 1952, contained an amount of $2,635,000 for the river and harbor surveys, planning, and other study program. An analysis of the report on the bill by the House Appropriations Committee indicates that money for planning authorized projects was specifically eliminated and that, of the amount for rivers and harbors, $150,000 was earmarked for beach-erosion studies and $2,000,000 for transfer to the Fish and Wildlife Service for construction of fish facilities on the lower Columbia River. Further, in applying the House cut, no reductions can be effected in the budget amount of $70,000 for stream-gaging studies, which must provide unbroken records to be of value, nor a greater amount than the $5,000 reduction for fish and wildlife studies, which must proceed on projects now under construction. The remaining amount of $405,000 for rivers and harbors must be spread over a program estimated to cost $1,185,000 and made up of $600,000 for the general survey program, $200,000 for the Arkansas-White-Red Rivers comprehensive survey, $300,000 for the New England-New York survey.

It is apparent from the foregoing that the reduced amounts approved by the House are insufficient to carry on the program of river and harbor surveys approved in the budget.

The following table shows the amounts budgeted for the items in the river and harbor survey program, the amount allowed by the House, and the allocations of this amount to the subdivisions of work that will be necessary unless the cuts are restored:

Possible use of funds allowed by House on river and harbor surveys in civil functions bill for fiscal year 1953

Item	Approved budget estimate	Possible use under House allowance
General survey program	$600,000	$305,000
Special surveys:		
Arkansas-White-Red	200,000	50,000
New England-New York	300,000	50,000
Subtotal, Arkansas-White-Red and New England-New York	500,000	100,000
Total	1,100,000	405,000

With the amount approved by the House, it will be impossible to make the progress planned under the river and harbor studies program approved by the President. Distribution of the reduced funds to all authorized investigations would not permit economical and efficient use of the money in general. Accordingly, only a few of the more important investigations can be carried on in fiscal year 1953 unless the requested appropriations are restored.

The lack of appropriations in fiscal year 1952 for examinations and surveys resulted in a severe curtailment of work and deferral of many important studies requested by Congress. The drastic cuts in the approved budget for the program in fiscal year 1953, if not restored, would mean that many important problems in areas authorized for investigation must be further postponed. At present, there are approximately 367 river and harbor reports assigned to the field offices of the Corps of Engineers for preparation in compliance with congressional authorization.

The need for funds for carrying out investigations for navigation and related water-resource developments is as urgent at this time as at any time in the history of the program. The existence of a large backlog of authorized projects does not, in any way, eliminate the navigation problems in other areas, particularly in view of changing traffic requirements, or the possible desirability of modifying presently authorized projects to meet changing needs. The continuing growth of the country and the changing needs of the defense program warrant appropriation of funds for work on the minimum navigation report program as approved by the President for fiscal year 1953.

The Corps of Engineers' survey program is Nation-wide; it includes specific investigations called for by Congress; it provides for preliminary examination of harbors and channels at small cost in order to eliminate costly detailed studies of unjustified projects. The program provides for the preparation of reports at field level where accurate physical conditions and local views can be readily determined at public hearings. It results in definite plans for specific projects in order that the engineering and economic feasibility of a project may be adjudged; and finally it provides a basis in accurate, complete, and printed form for the final decision of Congress as to whether or not a project should be authorized or modified.

Investigation of the rivers and harbors of the United States and possessions for navigation and related purposes should go forward in order that a well-planned and coordinated construction program of authorized projects can proceed as the Congress sees fit to make construction funds available.

Adequate navigation facilities and development of our water resources during periods of peace or war are an asset to our national economy. In view of the fact that all projects for these purposes stem originally from investigations to determine their feasibility, the examination and survey funds for rivers and harbors should be restored to the amounts in the budget.

(b) Arkansas-White-Red River Basins survey

The Flood Control Act of 1950 authorized the Corps of Engineers, through the Secretary of the Army, to make a survey of the Arkansas, White, and Red River Basins, in coordination with the Departments of the Interior and Agriculture, the Federal Power Commission, and other Federal and State agencies, with a view to developing comprehensive, integrated plans of improvement for navigation, flood control, and related land and water uses. The Corps of Engineers acts as chairman of the study commission set up to make the study. The Bureau of the Budget, in coordinating the program among the several Federal agencies involved, including the Departments of Agriculture, Commerce, and Interior, and the Public Health Service, has included $1,200,000 for continuation of the comprehensive study in fiscal year 1953, $1,000,000 of which would be allocated from flood-control survey funds and $200,000 from river and harbor survey funds. As indicated elsewhere, it would be possible to allot to this report only $120,000 from flood-control survey funds and $50,000 from river and harbor survey funds as passed by the House.

The presently scheduled date of completion of this comprehensive study is June 1954. It will be impossible to meet this date, and for the Corps of Engineers to maintain adequate progress on its part of the study in relation to other agencies, unless the amounts in the budget are restored.

The Arkansas-White-Red River Basins are an important segment of the Southwest, and the progress and development thereof, particularly in the present crucial period of national history, are vitally linked with proper development of the water resources of the region. The comprehensive study will determine the best coordinated program for control of devastating floods, improvement of navigation, and development of related water and land uses in the area. Much future Federal, non-Federal public, and private development in the region will be dependent upon the findings of the authorized study. In order that orderly progress may continue at all levels, it is believed highly desirable that funds be restored for the program.

(c) New England-New York survey

The Flood Control Act of 1950 authorized the Corps of Engineers, under the Secretary of the Army, to make a comprehensive study of the Merrimack and Connecticut Rivers and other streams in New England to determine the practicable hydroelectric potentialities in combination with other water and resource developments of the area. The President's directive of October 9, 1950, to the Secretary of the Army included the New York area, and the resolution of October 27, 1950, by the Federal Inter-Agency River Basin Committee formed an interagency committee, with the Department of Army as chairman, to make the investigation. Other agencies represented are the Departments of Agriculture, Commerce, and Interior, the Federal Power Commission, the Federal Security Agency, and the Governors of the seven participating States. The report is scheduled for completion by June 30, 1954.

The Bureau of the Budget approved a total of $1,100,000 for continuation of work on this study by the Corps of Engineers in fiscal year 1953, after consideration and coordination of the budgets of other concerned agencies. Of the above amount, $800,000 would be allotted from flood control and $300,000 from river and

harbor survey funds. As indicated elsewhere, it would be possible, with the amounts for these programs allowed in the civil-functions appropriations bill as passed by the House on April 2, 1952, to allot only $120,000 from flood control and $50,000 from river and harbor funds. Adequate progress by the Corps of Engineers toward meeting the schedule and maintaining coordinated progress with other Federal agencies would therefore be obviously impossible unless the amounts approved by the Bureau of the Budget are restored, especially in view of the reduced appropriation for this study in fiscal year 1952.

Early completion of the comprehensive study is considered highly desirable in view of the increasing needs of the region for a coordinated over-all plan of water-resource development, and the important influence existence of such a plan would have on further economical and industrial progress in the region.

2. BEACH EROSION STUDIES

In apportioning the House reduction under the appropriation "Examination, survey, planning and other study programs," no reduction was made in the approved budget estimate for beach-erosion studies since the House Appropriations Committee in its report on the civil-functions appropriations bill specifically stated that funds for this activity were not to be reduced.

3. PLANNING

Important river and harbor projects, involving structures such as canals, locks and dams, powerhouse structures, and certain entrance channels, and river alinement problems, require extensive detailed planning and model studies to insure the most economic design of the structures and the correct engineering solutions to foundation and other construction problems.

Starting in 1950 a program of redirecting the planning activities of the corps toward a limited number of projects of potential importance to the defense effort was initiated, and, was later intensified at the direction of the Congress, which in the conference report on the fiscal year 1952 Civil Functions Appropriation Act stated that planning should be continued only on those projects certified by the President as being in the interest of the national defense. This program of planning a few projects of importance to the defense is now in operation.

The budget estimate for rivers and harbors for fiscal year 1953 amounts to $800,000 and provides for planning activities on only 12 projects. The work on each of these projects is considered by the Corps of Engineers to be important to the defense and the national economy. These projects would provide for: Emergency stabilization on one river which if not promptly attended to may change its regimen and destroy important facilities; the replacement of obsolete locks on important waterways, which if not undertaken in the near future will cause the breakdown of inland-waterway transportation, seriously affecting the movement of materials vital to defense needs; and the construction of multiple-purpose projects to supply the power or other water-resource needs to various sections of the country where there is a deficiency for normal and defense construction and manufacturing requirements.

The budget estimate submitted for fiscal year 1953 was prepared on the assumption that the funds budgeted would be required in addition to the amounts estimated to be unobligated on June 30, 1952. The House Appropriations Committee, in its report, directed severe criticism at the corps for inadequate plans and estimates but recommended that no additional funds be made available for planning work. Adequate plans, and consequent orderly scheduling of construction work is necessary to bring about the most economical method of completing a necessary construction program. An abrupt termination of the planning program in the middle of detailed studies of a complex nature must inevitably result in an increase in the ultimate cost of these planning activities when resumed at some subsequent time with entirely new personnel totally unfamiliar with the particular aspects of the projects involved.

The funds requested for planning of river and harbor projects in the approved budget for fiscal year 1953 should be restored in order that this work may proceed so that, at the appropriate time, construction may proceed in an orderly and efficient manner with the projects making their contribution to the defense program and the national economy.

4. STREAM GAGING STUDIES (TRANSFER TO U. S. GEOLOGICAL SURVEY)

In applying the House reduction in examination, survey, planning, and other study programs, no change was made in this item. A reduction in this item would necessitate an unprecedented and abrupt curtailment in the long-established and extremely valuable program for the collection of basic hydrologic data. The value of hydrologic data is largely dependent upon uninterrupted station operation over a long period of years in order that a continuous record, as well as a maximum range of conditions may be observed. These data among other uses, are essential to the proper design, operation, and maintenance of navigation, flood-control, and multiple-purpose projects.

5. FISH AND WILDLIFE STUDIES (TRANSFER TO INTERIOR—FISH AND WILDLIFE SERVICE)

Approved budget estimate	$15,000
Allowed by House	10,000
Restoration requested	5,000

Justification for restoration.—The Fish and Wildlife Service is authorized to conduct surveys throughout the United States and Alaska of water-resource development projects of the Corps of Engineers, Bureau of Reclamation, and other Federal agencies, as well as projects licensed by the Federal Power Commission, to determine effects of such projects upon fishery and wildlife resources.

The House committee report (No. 1652) on the civil-functions appropriation bill, H. R. 7268, allowed construction funds for a number of rivers and harbors projects. The Fish and Wildlife Service has not yet prepared detailed reports on several projects in this list, mainly locks and dams. The committee report also indicated that the corps should proceed with surveys of projects of vital interest to the Nation's defense effort.

Effect of reduction.—A reduction of $5,000 as imposed by the House would mean the loss of one biologist, resulting in three to five rivers and harbors projects not receiving study by the Service. All Federal agencies concerned in any way with water-development projects have a responsibility to protect the fish and wildlife resources affected by such projects to the maximum extent practicable. Only through proper multiple-purpose planning can these responsibilities be met. The Service cannot, without adequate funds, meet its share of this responsibility.

ACQUISITION OF PROPERTY ON LEASED LANDS

Chairman McKellar. Are there any other questions?

Senator Young. May I ask this question?

Chairman McKellar. Indeed, yes.

Senator Young. A year ago the committee was considering accepting an amendment that I offered to give the Corps of Engineers authority to confiscate the property of owners whose property happened to be on leased land. A limitation was put on that amendment of $200,000. The property, as you will recall, was mostly Indian-leased land. Is that a sufficient amount?

General Chorpening. Senator, I have not recently checked on that, but I could check on it and report back to the committee or insert a statement in the record, if that will be satisfactory.

Senator Young. That will be fine.

Then also since that time I have had a request from, I think, two property owners in Elbowoods who find themselves in a similar situation. That community will be inundated, and you have no authority to compensate for the property there unless the amendment is extended to include them. Are those property owners in the same situation as those in Van Hook and Sanish?

General CHORPENING. I do not have that information here, but I can supply that for the record.

Senator YOUNG. First, will you tell us whether their situation would be similar to the property owners in Sanish and Van Hook, and secondly, will you state what would be the estimated cost and the number of property owners involved. I think there are only two or three. The amount would be very small but the loss to them would be just the same as though there were many people involved.

General CHORPENING. I will be glad to supply that, sir.

(The information referred to follows:)

Inasmuch as the 1952 Appropriation Act provided that the payment to be made in each case shall be limited to the fair value of the improvements or the cost of moving such improvements whichever is less, it is necessary to make a comparison of the costs of the alternative methods of payment. Appraisal reports have been completed which show a total value of $230,000. However, a report is now in progress to determine the cost of moving the improvements and although this report has not yet been completed, it appears that the sum of $200,000 may be sufficient to make the payments provided in the 1952 Appropriation Act. Additional information concerning more definite estimates of the cost of moving the improvements will be furnished the committee upon completion of the report now in progress. It is estimated that this report will be completed within the next few weeks. Since it is necessary that this report be completed prior to making any payments under the authorization, no funds have as yet been expended in connection with the acquisition of the property.

With regard to the situation in Elbowoods, the owners are in a similar situation to those in Sanish and Van Hook. There are three sets of improvements in Elbowoods; two are owned by an Indian trader and have a estimated value of $11,765 and one is owned by an employee of the Fort Berthold Indian Agency and has an estimated value of $3,350.

CORP OF ENGINEER DETERMINATIONS

Senator ECTON. Mr. Chairman, it seems to me that it will be very valuable information to the committee and also would show the carefulness with which the Corps of Engineers arrives at the determination of whether or not to build these projects, if we could have the information stating how many of the projects that have been considered and possibly recommended by the Congress have been turned down by the Army engineers as being nonfeasible.

General CHORPENING. We have that statistical information, sir, and will be very glad to place that in the record.

Senator ECTON. I would like to have that.

Chairman MCKELLAR. That will be done, if there is no objection.

General CHORPENING. It will be over a period of how long, sir?

Chairman MCKELLAR. How many years would you say?

General CHORPENING. Fifteen or twenty years, sir.

Senator ECTON. If you can give us that for the last 20 years, that would be sufficient.

General CHORPENING. Suppose we leave it this way: I think we have it for the last 25 years. If we have that readily available, I will put it in the record for that length of time.

(The information referred to follows:)

The Board of Engineers for Rivers and Harbors has taken final action on a total of 3,243 survey and preliminary examination reports during the last 22 years, 1930 to 1951, inclusive.

Of the 3,243 actions taken, 1,796 or 55.4 percent were unfavorable, and 1,447 or 44.6 percent were favorable.

Senator YOUNG. Before I forget about it, with respect to that amendment of last year providing not more than $200,000 for the

acquisition of property in Sanish and Van Hook, will you look into that and see whether the $200,000 was sufficient? If the $200,000 was more than the amount needed, will you state how much of that would be left over?

General CHORPENING. Yes, sir; we will get a complete factual statement on that, sir.

Chairman MCKELLAR. This will be off the record.

(There was a discussion off the record.)

Senator CAIN. Mr. Chairman, I think you are conscious of the fact, sir, that even though some sort of a valley authority by way of argument might become required in the northwest section of this country, it certainly would not be required because of any similarity to the Tennessee Valley Authority.

Senator ECTON. No.

Senator CAIN. No similarity that the northwest region might hold to the Tennessee Valley region. They are entirely different geographically and from the standpoint of resource questions.

I share strongly the point of view of my friend from Montana that people ought to quit trying to encourage a valley authority for the Columbia River Basin on the grounds that an authority has been successful in the Tennessee Valley.

Senator YOUNG. I think there are some weaknesses in the present plan for the Missouri Basin. I think that if these corrections could be made—and I think they should be—the program would be much more acceptable in certain areas of the basin.

Senator ECTON. I think we are making progress along that line of ironing out the difficulties.

Chairman MCKELLAR. Ironing out the kinks.

Senator ECTON. I think we are making progress.

Chairman MCKELLAR. Is there anything further, General?

RESTORATION OF HOUSE CUTS

General CHORPENING. Mr. Chairman, we have here in our requests for restoration, detailed statements as to the impact of the cuts that have been made on each of the projects. I do not know whether the chairman wants me to go into each one of these, but for many of them I would like to put into the record a statement and for others like the Cheatham Dam and a number of other large projects, I would like to give the committee a little further information on what that impact is going to be. I think it would be helpful, sir.

Chairman MCKELLAR. Very well, we will be glad to hear that, as far as I am concerned. I do not believe there is any objection on the part of the members of the committee.

(The information referred to follows:)

Project	Amount in Act	Proposed amendment	Total request
1. Channels and harbors	$18,750,000	$6,793,000	$25,543,000
2. Locks and dams	7,570,000	11,222,700	18,792,700
3. Multiple-purpose projects	93,500,000	70,630,300	164,130,300
4. Fish and Wildlife construction	0	3,870,000	3,870,000
Subtotal (construction)	119,820,000	92,516,000	212,336,000
Reduction in salaries and expenses	−2,110,000	+2,110,000	0
Total direct obligations	117,710,000	$94,626,000	212,336,000

RIVERS AND HARBORS CONSTRUCTION

DEMOPOLIS LOCK AND DAM, ALA.

General CHORPENING. In the case of Demopolis Dam, the House cut was $500,000. The amount we asked for in the budget was $5,500,000 and represents our considered, and well-considered, conclusion as to what is required there for orderly progress. That lock and dam is going to replace four obsolete locks, and the sooner we can get that completed the sooner we are going to begin to get the benefits of funds already expended.

Chairman MCKELLAR. How much would it take to finish that work?

General CHORPENING. The total required after the fiscal year 1952 appropriation is a little over $13 million. This year we are asking for $5,500,000. I have a very brief statement, sir which I ask permission to place in the record.

Chairman MCKELLAR. Without objection, that will be done.

(The document referred to follows:)

DEMOPOLIS LOCK AND DAM, THE WARRIOR SYSTEM, MOBILE TO BIRMINGHAM, ALA.

EFFECT OF REDUCTION

A reduction of $500,000 in the approved budget estimate would by necessity be applied against the contract for the lock, dam, and appurtenances. This reduction would not leave sufficient funds to finance the contract at the contractor's scheduled rate of progress. This will cause a delay in completion of the entire project since all other items of the project are scheduled to be completed by the time the lock, dam, and appurtenances are completed.

JUSTIFICATION FOR RESTORATION

It is urgent that sufficient funds be appropriated so that the Demopolis lock and dam may be completed at the earliest practicable time since it will replace four obsolete locks which have been in service about a half century with a modern 110-by-600-foot lock with a maximum lift of 40 feet, eliminating the multiple lockages now required and considerably reducing the time of travel; making it possible to handle more traffic in less time and consequently reducing the cost of navigating this reach of the river. It is very urgent that replacement of the four obsolete locks be accomplished as soon as possible since they are in very poor condition and easily subject to breakdown which would tie up movement of ore to the steel mills at Birmingham from the port of Mobile and steel from Birmingham to the shipyards and other industries along the Gulf coast. Facilitating the movement of critical materials to and from the highly industrialized steel-producing center of Birmingham is of definite value to the defense effort.

JIM WOODRUFF LOCK AND DAM, GA. AND FLA.

General CHORPENING. I would like to turn now to Jim Woodruff Dam.

Chairman MCKELLAR. Do you have a summary of it there?

General CHORPENING. Yes, sir. I am not requesting that all of this go into the record, but rather just a particular part in which we ask for the restoration.

Chairman MCKELLAR. All right, sir.

General CHORPENING. On Jim Woodruff Dam, the cut was not large, sir. It was $330,300. But it will have some impact, as we see it, as to when power will become available from that structure. It is needed there, and we ask for the restoration.

(The following information was supplied:)

JIM WOODRUFF LOCK AND DAM, FLA.

EFFECT OF REDUCTION

A reduction of $330,300 would by necessity be applied against construction of the gated spillway, powerhouse, intake structure and switchyard fill. An insufficiency of funds would not allow the contract to be continued at the rate of efficiency of the contractor's proposed operations which is necessary for the contract to be completed at the scheduled date. The proposed reduction could delay completion of the project by about 1 month.

JUSTIFICATION FOR RESTORATION

Funds in the full amount of the budget estimate should be provided to permit the orderly planned continuation of this important multiple-purpose project. The scheduled date for the first 10,000-kilowatt power unit to be on the line is July 1954. The early production of power in accordance with the present schedule is essential in this area where it is urgently needed to aid the national defense program. In addition to the power generated at Jim Woodruff Dam, the project is the first step in providing an additional transportation facility to the area, which will be vital to its economic development in peace and to the Nation's defense in time of emergency.

CHAIN OF ROCKS CANAL

Now, the next project is the Chain of Rocks Canal at St. Louis. We have had allotments to date of $38,528,000. The funds that we asked for this year amounted to $1,297,000, which would complete it. The House appropriated only $1 million, and has put in their report language which says that we will complete the project for that amount. Well, gentleman, we cannot physically complete the project for that amount. The work that needs to be done to finish it just cannot be done.

I respectfully ask that we have that restoration of $297,000.

I would be more than happy if we could do it for less, but I know the facts are that we cannot.

Chairman MCKELLAR. What did you say the amount was that you need?

General CHORPENING. $1,297,000, sir.

Chairman MCKELLAR. That is the least you can do it with?

General CHORPENING. Yes, sir. The total cost of that structure is nearly $40 million. There it stands. We have not been able to complete it so as to run traffic through it. We should be getting the benefits of the funds expended.

(The following information was supplied:)

MISSISSIPPI RIVER BETWEEN OHIO AND MISSOURI RIVERS, CHAIN OF ROCKS CANAL, ILL.

EFFECT OF REDUCTION

The allocation allowed by the House will result in a reduction of the funds available for item No. 5, "Canal and levees." The allocation contained in the approved budget estimate contains approximately $900,000 for construction of channel-training works at the lower entrance of the canal to prevent silting of the lower entrance, about $275,000 for completion of placement of riprap stone under a continuing contract scheduled for completion during fiscal year 1953, $92,000 for seeding and mulching of levees also to be completed during fiscal year 1953, and $30,000 to complete engineering and design. The House reduction of $297,000 will result in delay in completion of the channel-training works at the lower entrance of the canal, which could result in additional silting in the lower entrance of the canal. This would require additional maintenance dredging in order to keep the canal in operation. The reduction would delay the completion

of the project until the fiscal year 1954 and could result in increasing the total cost of the project. In no event could the project be completed with the allocation allowed by the House.

JUSTIFICATION FOR RESTORATION

The budget estimate cut should be restored to avoid the possibility of occurrence of the conditions cited above. It is believed that adherence to scheduled progress for completion of all features of the Chain of Rocks canal is important to national defense. Also it is believed that completion of this project should be accomplished at the earliest possible date, as delay could hamper the fast-growing commerce on this important waterway and could adversely affect the transportation of national defense materials when low river stages of long duration are experienced. In this connection, the canal and lock are planned to be opened for the 1953 navigation season.

MISSOURI RIVER, KANSAS CITY TO SIOUX CITY

Now we come to the Missouri River, from Kansas City to Sioux City. We are asking for restoration of the $750,000 reduction made by the House on that stretch of the river. Prior to the war we were getting along pretty well. We did no work during the war years. I am talking about World War II. As a consequence, the structures there deteriorated. We have been trying to make headway since the war, but we have not made very much. The flood that has just happened, we know has torn out some of the work that was in place. We do not know how much that amounts to as yet. We have just a rough estimate of what damage has been done.

We feel very strongly that this project should go along at least at the minimum rate which has been established by the budget and the President of $5 million for fiscal year 1953.

(The following information was supplied:)

MISSOURI RIVER, KANSAS CITY TO SIOUX CITY

EFFECT OF REDUCTION

The House reduction will necessitate deferring construction of 18,200 linear feet of dike and revetment structures critically needed in the stabilizing process to provide a navigable channel and to eliminate channel conditions which are presently conducive to the formation of flood-producing ice jams and will permit only about one-half of the amount of dredging planned. This dredging is necessary to maintain a minimum construction schedule and by retarding this item it will take two or more years to complete certain structures that could be completed in one season if adequate dredging could be performed. The reduction further will delay removal of 500 linear feet of structures which interfere with proper development of reaches that have had to be realined to obtain satisfactory navigation depths and relieve the hazard of contributing to ice jams.

The above would have a serious effect on the project. Pile structures in channel training systems at many strategic points on the river are old and need immediate reinforcement with stone. If not reinforced in an orderly, systematic manner as planned, the structures will completely deteriorate, necessitating complete replacement of some systems at a much greater cost and extending the project completion time.

JUSTIFICATION FOR RESTORATION

Complete restoration of funds is justified in the interest of over-all economy and in providing at the earliest practicable date a stabilized channel for navigation and for prevention of destructive erosion of valuable lands and installations. Funds spent now to hold the present alinement will be substantially less than the cost to recapture lost alinement at a later date.

Local interests are demanding that action be taken to halt the destructive action of the uncontrolled river upstream from Omaha, and at the same time navigation interests are increasing their efforts to secure water transportation downstream from Omaha. Unless appropriations are incurred, the necessity for protecting the Government's large investment below Omaha is of primary concern. Restoration of the House cut will aid in the recapture of a stable channel below Omaha.

LOCK AT KEOKUK, IOWA

The next project is the replacement of a lock at Keokuk, Iowa. That was one of the new starts that was included in the buget and which I touched on earlier in my remarks.

Gentlemen, the lock that is there now was built in 1913 by a private company and taken over by the Government when the upper Mississippi navigation project was authorized by the Congress. It is a completely inadequate lock, and, furthermore, it is in such bad repair that this winter we had to spend $250,000 to repair it. We are most fearful that the existing lock may fail at any time because the concrete has deteriorated to such an extent. If that happened, it would mean that 4 million tons of shipping now passing that lock would have to move by some other means, predominantly by rail. This would require a diversion of locomotives and cars, which would have to be pulled from other parts of the country, and would make practically useless the remaining part of the upper Mississippi Valley waterway.

We think that this is a project which is vital to national defense, and we ought to get going on the construction of a modern lock at this place. The appropriation was entirely eliminated by the House.

Chairman McKELLAR. When did you say that was first built?

General CHORPENING. In 1913, sir. It was built by a private company and taken over by the Government when the upper Mississippi Valley navigation plan was authorized.

Shipping on the upper Mississippi is increasing every year.

Chairman McKELLAR. It is increasing all along there; is it not?

General CHORPENING. Indeed, it is, and it is exceeding by a considerable amount the traffic estimates we made at the time we recommended it to the Congress.

Chairman McKELLAR. That is largely due to the oil that is being transported?

General CHORPENING. Petroleum and coal, sir.

Chairman McKELLAR. Oil is one of the principal products that is transported that way?

General CHORPENING. Yes, sir.

(The following information was supplied:)

LOCK NO. 19, KEOKUK, IOWA

EFFECT OF REDUCTION

Failure to appropriate funds for this project will prolong for an indefinite period the hazard to the entire upper Mississippi Valley waterway system and add to the already considerable annual losses experienced by shippers due to the bottleneck created by the present inadequate and costly lock at Keokuk. Existing lock 19 is 40 years old and has deteriorated to a point where it is structurally unsound and incapable of satisfactorily handling existing commerce. Unless replacement is initiated at once, it will be necessary to expend approximately $2,500,000 in the next 6 years to take care of the most obvious structural defects, with no permanent improvement in the general structural suitability

of the lock and with increasingly serious delays to the heavy and growing traffic on the river. Repairs of the structure will have to be made at the inordinately high costs that result when major repairs must be accomplished during the winter season or under traffic. Failure of any of the vital parts would stop traffic through the lock for extended periods. The average time for lockage of all tows past existing lock 19, in 1950, was more than 3 hours, as contrasted with an estimated lockage time of 45 minutes for the new lock. Continuation of these delays to navigation, and more imminent danger of failure of the lock, which might completely block traffic on the upper Mississippi River, will be particularly detrimental to the defense effort.

JUSTIFICATION FOR RESTORATION

All existing programs of civil-work maintenance, including long-range programs for the replacement of structures as they become older, have been suspended or curtailed where they do not contribute to the defense effort. Efforts have been concentrated on the completion of those projects which will support the national ecenomy in such a defense effort. The construction of a new lock at Keokuk is definitely in the second category. It will bring to dependable operation an existing navigation system at a time when it is an increasingly vital element in the national economy. During emergencies, such as the present one, when the fullest and most efficient use of all transportation facilities is required, the large volume of traffic on this wateway must flow without interruption. Industry in the upper Mississippi River Basin, which made a large contribution to the war effort during 1941–45, has been greatly expanded and diversified since that time by new industries attracted by the central location and excellent transportation facilities, and at the present time is producing a large volume of defense materials. Traffic through Keokuk lock has increased from about 1 million tons to 4 million tons in the period from 1939 to 1950, and the time lost to tows awaiting lockage in 1950, as compared with the estimated time required for passage with the proposed new lock, is computed to be 62 days. The cost of present traffic delays because of the inadequacy of the lock is estimated to be about $200,000 per year. Should there be a major structural failure, the following would result: a loss of transportation savings of $12,400,000 per year for a minimum of 2 years, during which time a replacement lock would be under construction at a greatly accelerated and uneconomic rate; an imposition of loads on alternate forms of transportation beyond their present capacity, causing a need for about 2,000 coal and tank cars and 25 to 30 locomotives; construction of expanded or replacement rail-terminal facilities; losses due to redeployment of towing equipment and adjustments of trade relationships; and losses due to "trapping" of towing equipment above the dam.

Irreparable harm to the defense effort will be caused by a diversion of traffic from water to rail transportation, not only because of losses in transportation economies, as set out above, but also in the use of strategic materials for construction of additional rolling equipment not otherwise available. Materials used in the manufacture of railroad rolling stock are in shorter supply than those to be used in constructing a new lock at Keokuk and also manufacturers of rolling stock are already overburdened in an attempt to supply the necessary equipment for use in established rail trade routes.

In view of the foregoing, it would be foresighted to proceed immediately with construction of the lock in the interest of the defense effort and in the interest of the civilian economy.

BALTIMORE HARBOR, MD.

Next we come to Baltimore Harbor. Baltimore, as the chairman and the members of the committee know, is one of our large ports of the Nation. We have asked for $800,000 to deepen the main channel up there. The House has allowed only $400,000 of that amount.

Chairman McKellar. And you cannot do the work for that amount?

General CHORPENING. Considering the commerce that is there, we just do not feel that the $400,000 is adequate. No, sir; we cannot do the work required with the $400,000. It will take the entire $800,000, and it is well justified from the national-defense standpoint.

(The following information was supplied:)

BALTIMORE HARBOR AND CHANNELS, MARYLAND

EFFECT OF REDUCTION

The reduction by the House in the amount of $400,000 will delay by 1 year the extension of the Fort McHenry section of the main channel leading to Baltimore Harbor and will reduce the work area to an extent which will be less inviting to contractors, thus inviting an increase in the unit price per cubic yard of material that is to be removed.

JUSTIFICATION FOR RESTORATION

The amount requested in the President's budget is to be utilized for continuation of the deepening to 39 feet of the Fort McHenry section of the main channel leading to Baltimore Harbor, Md. It is particularly imperative that the deepening of the main channel be accomplished as quickly as possible to care for the rapidly increasing movement of iron ore imports to Baltimore. Until the main channel is completed to the Ferry Bar Branch Channel, existing newly constructed and proposed ore terminal facilities of the Western Maryland Railway cannot be fully utilized, whereas their full use will be necessary to permit efficient handling in the port of Baltimore of this increased ore tonnage.

Baltimore Harbor is one of the leading ports of the United States with a total tonnage of 35,640,406 tons in 1950. It ranks second nationally since 1947 in weight of foreign trade with 15,058,935 tons reported for 1950. Baltimore Harbor is principally a bulk-cargo port. The main items of commerce are ore, petroleum, petroleum products, grain, sugar, fertilizer, and coal. Fertilizer moves mostly in coastwise trade and in the average size coastwise vessel. The other products are moved in large vessels some of which are said to be the largest freight vessels afloat. The ore ships have loaded drafts up to 36 feet, tankers and coal vessels to 35 feet, and the vessels in the grain and sugar trade to 33 feet with several exceptions with drafts up to 35 feet.

The ore vessels are destined for all parts of the harbor, to Bethlehem Steel at Sparrows Point and to the railroad ore terminals located in Curtis Bay, Port Covington, and Canton. The tankers are consigned to docks in Curtis Bay, Fairfield, and the Northwest Harbor, while coal vessels load at Curtis Bay, Canton, and the Northwest Harbor. The grain vessels use the piers at Canton, Port Covington, and Northwest Harbor, with the vessels in the sugar trade using Northwest Harbor. It is obvious, therefore, that the deep-draft vessels must navigate the full length of the channel to Fort McHenry.

Considerable delays are encountered by these deep-draft vessels in the areas of the main channel which have not yet been completed to the 39-foot depth. The vessels require about 4 feet more of water than their loaded draft for safe navigation in a restricted channel. This additional depth is required for squat of the vessels while underway and for water under the keel for maneuvrability.

Senator YOUNG. Are you going to point out any place where we can save some money?

General CHORPENING. There is over $2 million that we are not asking for restoration to the budget estimate.

ST. ANTHONY'S FALLS, MINN.

Now, the next project is St. Anthony's Falls at Minneapolis, Minn. There the action of the House was to eliminate all of the funds requested for fiscal year 1953.

On this project we have allotments to date of over $5 million, and to stop that job now would be quite expensive to the Government.

Chairman McKellar. About how much would it cost to stop, at the present prices?

General Chorpening. Contract termination charges would be over $300,000. But in addition to that we would have to take steps to protect the work that has been done in the river. I would say that the direct and indirect costs of stopping that work now would run up into the neighborhood of $750,000. That is just not an economical proposition. We should go ahead and complete that portion of the project that is now under contract.

I might also mention that the recent record flood at St. Paul has probably done some damage to this structure under construction. We do not know yet what that will amount to. We are looking into it. That may have some impact on funds later required.

We do feel that to eliminate this now would be a distinct economic loss to the Government.

(The following information was supplied:)

St. Anthony Falls, Minneapolis, Minn.

EFFECT OF REDUCTION

The reduction by the House will make it necessary to terminate the existing continuing contract, provide protection for completed structures, and will delay completion about 18 months.

JUSTIFICATION FOR RESTORATION

The elimination of funds for this project would increase the project cost by more than $750,000, including contract termination charges in excess of $300,000. The increase would result from the necessity for removal of the cofferdam with subsequent replacement when funds are available; the protection of foundation areas; protection and storage of fabricated steel items; contract termination charges; the removal of protection for foundation areas and other associated items of construction when funds are again available, and the repiar of damage from erosion occurring between the time of termination and the time of resumption of work.

In view of the very costly effect of terminating construction of the lower lock and dam, it would be economically advantageous to the Government to complete the lower lock and dam. Restoration of the budget estimate accordingly is recommended.

NAVIGATION, MISSOURI RIVER, KANSAS CITY TO MOUTH

Next we come to the Missouri River navigation structures, from Kansas City to the mouth. The same remarks that I made earlier on the Missouri River from Kansas City to Sioux City apply here.

The cut was $1,200,000. We ask for the full restoration there.

It is very uneconomical to proceed at a very slow rate on that river stabilization program. We are just not gaining, and structures may be lost that could be held if we were to go ahead there at a proper rate of progress.

(The following information was supplied:)

Missouri River, Kansas City, Mo., to Mouth

EFFECT OF REDUCTION

The reduction will result in establishing a slower and less economical rate of construction that will prolong project completion. It is evident, however, that stabilization works should be completed as rapidly as possible if major replacement and reconstruction of initial control works is to be avoided. In this connection, the majority of pile structures in place are from 15 to 20 years old and

it is considered that the economic life of piling is from 12 to 15 years. Furthermore, initiation of construction on the major realinements proposed at Jackass Bend (mile 343) and Bates Island Bend (mile 90), which are essential units of the program established for early completion of the project, will be delayed. The project is about 78-percent complete and work must be finished as rapidly as possible to avoid a substantial increase in the total cost of the project as well as excessive maintenance costs.

JUSTIFICATION FOR RESTORATION

Funds should be restored in order to permit initiation of construction on the two major realinements and on a systematic and economical rate of progress with a view to early completion of the project and considerable savings in the ultimate cost of the work.

Recent floods have damaged the control works at the locations of the realinements to such an extent that it is considered uneconomical and impracticable to attempt to further maintain the existing alinement. This damage has permitted serious erosion of adjacent farm lands at each location. Construction of the realinements will result in stabilizing the river channel and checking the erosion. In addition, realinement at the above locations will materially affect the alinement and location of the proposed agricultural levees in these locations, and consequently must be completed sufficiently in advance of their construction to assure a stable channel and bank lines. Deferral of urgently needed control works automatically increases the recurring maintenance costs of the project due to the necessity of undertaking stop-gap measures until final construction can be completed. Completion of the navigation channel at an early date is essential to meet the demands of expanding industry for transportation of materials necessary to the defense needs.

BUFFALO HARBOR, N. Y.

Next is Buffalo Harbor, N. Y., The budget estimate was $436,000. That was entirely eliminated by the House.

Now, Buffalo Harbor is one of the very important harbors on the Great Lakes. The steel companies have expended a very considerable amount of money to have dock and freight-handling facilities built there on the basis that this work was going to be provided. Certainly that has a direct impact on national defense—keeping the steel companies' facilities moving. We feel that the $436,000 should be restored and the work accomplished.

(The following information was supplied:)

BUFFALO HARBOR, N. Y.

EFFECT OF REDUCTION

The House reduction will delay by at least 1 year the completion of a transportation facility important to the production of steel for defense and will extend the over-all completion date of the authorized work on this important Great Lakes harbor.

JUSTIFICATION FOR RESTORATION

The budget estimate of $436,000 will be applied to deepening the south entrance and a channel in a portion of the southerly outer harbor to a depth of 25 feet. This will permit deep-draft vessels to traverse the outer harbor to the Bethlehem Steel Co.'s slip (Lackawanna canal). This organization is currently engaged in a $175 million plant expansion and will require the use of large deep-draft vessels to supply sufficient raw materials to operate its expanded facilities to capacity. Included in the Bethlehem Steel Co.'s plant expansion are plans to deepen and reconstruct their ore and limestone terminals adequate for vessels of 24-foot and 25-foot draft, which work is currently in progress. They have estimated the cost of this reconstruction of their terminal facilities at $6,250,000 and expect to have the actual work completed during 1952. In addition, Bethlehem is constructing two new Great Lakes ore carriers of 24½-foot draft which they will use in the transportation of ore and limestone to their plant, commencing with the 1953 navigation season. The deepening is necessary for the full utiliza-

tion of the expanded plant and terminal facilities and should be accomplished at the earliest practicable date.

In 1950 Bethlehem Steel Co. received approximately 4,900,000 tons of iron ore and limestone at their plant, which quantities were about the largest that could be handled with their existing marine facilities. After completion of their terminal reconstruction project, and the Federal work proposed herein, they expect to receive approximately an additional 1,950,000 tons of iron ore and limestone for a total of 6,850,000 tons. This increase will be required to keep their plant, with its expanded facilities, operating at full capacity.

On March 23, 1952, the Bethlehem Steel Co. commenced the operation of its newly constructed blast furnace. Operation of this furnace will require additional receipt of raw materials during the 1952 navigation season, which they propose to bring to their docks by means of one of the new deep-draft vessels. Until such time as a 25-foot depth access can be provided in the Federal project, the uneconomical practice of carrying partial cargoes will have to be used.

When the authorized deepening of the southerly portion of Buffalo Harbor is fully completed, deep draft access also will be available to the Union Canal serving the Hanna Furnace Corp. and the Pennsylvania Railroad ore docks and such harbor industries as the Lehigh Portland Cement Co. and the Pool grain elevator. Other industries are expected to be attracted to this area by being able to utilize to the fullest the deeper drafts of the modern ships sailing the Great Lakes. It is also the most logical site for a general cargo terminal.

I might say that on all of these, sir, I am only paraphrasing this statement which I am placing in the record. It gives more details. I do not want to burden the committee now with going into all of those things.

Chairman McKellar. It is not necessary to have that printed, but we will have it before the committee as part of the record.

General Chorpening. Yes, sir.

Chairman McKellar. Did that go into the House hearings?

General Chorpening. No, sir. I made a very complete record in the House in defending these items, but I did not know when I appeared before the House which ones they were going to cut. The cuts having been made, this is an appeal from the amounts that the House allowed.

Chairman McKellar. General, I will tell you what I would like to have you do. I think it would be wise for you to go over each one of these items and just see what is the least amount that you can get along with and then report back to the committee, if you can. I know that you have already done that, but do it again and just see what can be done. We do not want to spend any more money than we have to.

I feel this way about it: I feel that we ought to build up our own country. I am entirely in sympathy with what you are doing. I think the engineers are doing wonderful work. I am entirely in sympathy with it.

But at the same time, we want to be as economical as possible.

General Chorpening. I appreciate that, sir. In reviewing the cuts made by the House, we kept that in mind. We will be glad to make another critical examination, sir, and report our findings to the committee.

Chairman McKellar. Are there any further questions?

General Chorpening. Would the chairman like me to go through all of these?

Chairman McKellar. I think it would be well to prepare a résumé of them and put that in the record, in addition to what you have already put in.

General CHORPENING. I can make a résumé of these and put that in the record.

Chairman MCKELLAR. I would not say for each one of them, but, say, only for the important ones.

General CHORPENING. Yes, sir.

Senator YOUNG. May I ask this question?

Chairman MCKELLAR. Yes, sir.

RESTORATION FOR FORT RANDALL AND GARRISON DAMS, N. DAK.

Senator YOUNG. Before we recess, how important, General, would you say the restorations for Fort Randall and Garrison Dams would be in view of the fact that next year you will be closing the dams—or are you closing Randall this year?

General CHORPENING. We are closing Randall this summer. We will be closing Garrison next year.

Senator YOUNG. How important is it to get that restoration when you are closing Randall this year and Garrison next year?

General CHORPENING. That restoration is important. Of course, we have some unexpended funds available now, but what we are going to receive here will certainly enable us to go ahead. Once you start a closure, you just have to proceed. That is certain. You cannot stop at that moment.

Now, as I said before, the amount in the budget, we feel, is adequate on Randall and on Garrison. We do not need any additional funds over what is in the budget on those. The same thing applies to Gavins Point.

I did indicate that on Oahe we could economically utilize $12 to $15 million.

I think, sir, that if you want a briefed-down summary of these, what we do have in here is just what you would like to have in the record, sir.

Chairman MCKELLAR. We do not want to make it too long.

General CHORPENING. This is brief. I think it will be satisfactory to the chairman.

Chairman MCKELLAR. All right, are there any other questions, gentlemen?

General CHORPENING. I would like to be able to place in the record these short résumés that the chairman has asked for.

Chairman MCKELLAR. That will be done.

General CHORPENING. Then, of course, I will be here with my people right through the hearings, just as we were last year.

Chairman MCKELLAR. All right, sir.

Now, do we have any other witnesses here this morning?

I know that Senator Knowland has some witnesses, but they will not be here until next Monday, I believe.

The committee will recess at this time. General, the clerk of the committee, Mr. Smith, will call you and arrange for the next meeting. We are very much obliged to you.

The committee will stand in recess subject to the call of the chairman.

(Whereupon at 12:30 p. m., Tuesday, May 6, 1952, a recess was taken, the subcommittee to reconvene upon the call of the chairman.)

96227—52——14